UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,047	12/31/2001	Lee Friedman	36968/258392 (BS01155)	2287

23552 7590 02/24/2005	EXAMINER	
MERCHANT & GOULD PC	REILLY, SEAN M	
P.O. BOX 2903	ART UNIT	PAPER NUMBER
MINNEAPOLIS, MN 55402-0903	2153	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/039,047	FRIEDMAN, LEE
	Examiner	Art Unit	
	Sean Reilly	2153	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>31 December 2001</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-48</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-48</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>31 December 2001</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All b) ☐ Some * c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 20050209

DETAILED ACTION

This office action is a first action on the merits of this application. Claims 1-48 are presented for further examination.

Priority

1.   The effective filing date for the subject matter defined in the pending claims in this application is 11/2/2001.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.   Claims 13-30, 44, and 46-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3.   Regarding claim 13, the phrase "for distribution a plurality of sets" in line 4 is ambiguous. It is presumed the phrase should read, "for distributing a plurality of sets."

4.   Claim 13 also recites the limitation "the network administration device" in line 9. There is insufficient antecedent basis for this limitation in the claim. It is presumed the network administration device refers to the network device in line 4.

5.   Regarding claim 15, the phrase "of *lat* least" in line 2 is ambiguous. It is presumed the phrase should read, "of at least."

6.   Regarding claim 21, the phrase "each distribution means" in line 1 is ambiguous. There is

no distribution means claimed. It is presumed the applicant intents further limit the central

server of claim 13.

7.   Regarding claims 22-27, the claims as written are ambiguous. It is not clear whether the

claims attempt to redefine the functionality of the processor and transmitter in claim 21 or simply

provide a means for the added functionality claimed. It is presumed the Applicant intents to

claim a means for the added functionality.

8.   Regarding claim 44, the phrase "wherein the data is adapted according to the set of

parameters" in line 3 renders the claim ambiguous. It is not clear whether the centralized server

or the distribution device adapts the data. It is presumed that the centralized server adapts the

data since it receives the transmission characteristics as stated in claim 43.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

9.   Claims 1-9 and 31-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Hadland

(U.S. Patent Number 6,405,254).

10. Regarding claims 1 and 31, Hadland discloses a method executed by a centralized sending device for distributing data to a plurality of receiving devices that are coupled to the backbone of the network of a heterogeneous network, comprising:

- receiving at the sending device, a set of parameters (facilities) representing the transmission characteristics of a backbone of the heterogeneous network (Col 3, lines 24-27) [note the definition of protocol as defined Col 2, lines 27-33];

- adapting the data to conform to the set of parameters (Col 4, lines 55-67), and

- transmitting the adapted data to at least one receiving device that is connected to the backbone of the heterogeneous network (Col 4, lines 66-67). [Note: The data may also be transmitted to other receiving devices that have various network link parameters (Col 5, lines 10-18).]

11. Regarding claims 6 and 36, Hadland discloses a method executed by a distribution device of adapting data according to a set of parameters associated with a network segment that is downstream from the distribution device, comprising:

- receiving at the distribution device instructions, wherein the instructions instruct the distribution device to adapt the data (Col 3, lines 24-27);

- receiving the data from a sending device (Col 4, lines 55-56);

- adapting the data to conform to the set of parameters associated with the network segment (Col 4, lines 56-67); and

- transmitting the adapted data along the network segment (Col 4, lines 66-67).

12. Regarding claims 2 and 32, Hadland discloses receiving instructions that instruct the sending device to adapt the data (facilities; Col 3, lines 24-27) according to the set of parameters (defined

within a facility/policy; Col 2, lines 27-33) [Also see conversion example Col 4, lines 55-67; and

note that protocols and parameters can be added and/or modified as needed Col 3, lines 33-37).

13. Regarding claims 3 and 33, Hadland discloses receiving the set of parameters occurs when

there is a change in the set of parameters (Col 3, lines 33-37).

14. Regarding claims 4 and 34, Hadland discloses receiving the instruction occurs when the

sending device detects a change in the set of parameters (Col 3, lines 33-77).

15. Regarding claims 5 and 35, Hadland discloses receiving a request for the data from the

distribution means (Col 4, lines 22-32).

16. Regarding claims 7-8 and 37-38, Hadland discloses adapting the data further comprises

adjusting a packet size of the data according to bandwidth restriction of the network segment and

routing the data according to routing restrictions (e.g. transmission rates, frame formats, blocking

heading) of the network segment (Col 2, lines 27-33).

17. Regarding claims 9 and 39, Hadland discloses adapting the data further comprises

replicating the data (inherent; only the protocol changes in Hadland's system, the content is

never changed).

18. Claims 43-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Sahai et al. (U.S.

Patent Number 6,594,699; hereinafter Sahai).

19. Regarding cliam 43, Sahai discloses a method executed by a distribution device of

transmitting a set of parameters associated with a network segment to a centralized server that is

upstream from the distribution device, comprising:

    ❑ receiving, at the distribution device (any router, switch, proxy or server device that

sits between the client and central server which is needed for communication over the

internet; Col 2, lines 46-50) a set of parameters representing the transmission

characteristics (Col 4, lines 15-32) of the network segment (entered by the client and

passed upstream passing through a distribution device; Col 4, lines 9-11); and

    ❑ transmitting the set of parameters to the centralized server (Col 4, lines 9-11).

20. Regarding claim 44, Sahai discloses receiving, at the distribution device, data from the

centralized server, wherein the data is adapted according to the set of parameters; and

transmitting the adapted data along the network segment (stream sent in return of the user

request; Col 5, lines 41-46).

21. Regarding claim 45, Sahai discloses transmitting the set of parameters occurs when there is a

change in the set of parameters (automatically occurs since parameters are sent with each stream

request and the parameters are updated anytime capabilities change Col 4, lines 1-2).

22. Regarding claim 46, Sahai discloses adapting the data comprises adjusting a packet size of

the data according to bandwidth restrictions of the network segment (Col 4, line 15).

23. Regarding claim 47, Sahai discloses adapting the data further comprises routing the data

according to routing restrictions of the network segment (Col 4, lines 45-49).

24. Regarding claim 48, Sahai discloses adapting the data further comprises replicating the data

(inherent since the actual media content is never changed).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

25. Claims 10-12, 13-30 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Hadland (U.S. Patent Number 6,405,254) and Natarajan et al. (U.S. Patent Number

6,539,427; hereinafter Natarajan).

26. Regarding claim 10, Hadland fails to disclose transmitting the set of parameters from the

distribution means to a network administrator. In a related art, Natarajan discloses a network

policy engine (Figure 2, Component 254) which distributes control information (sets of

instructions for adapting data according to a set of transmission parameters) (Col 6, lines 56 –

Col 7, line 20) to various network elements (Col 7, lines 53-54, 61-65). Natarajan further

discloses transmitting the set of parameters from the distribution means (Col 7, lines 10-14) to a

network administrator (Col 27, lines 56-60). It would have been obvious to one of ordinary skill

in art at the time of invention to modify Hadland's invention to distribute sets of parameters to

the network administrator as disclosed by Natarajan in order to achieve a desired network

performance level by dynamically modifying network parameters (Natarajan, Col 2, lines 20-22).

27. Regarding claims 22 and 40, the limitations of claims 22 and 40 are similarly drawn to the

limitations of claim 10, thus they are rejected using a similar rationale.

28. Regarding claims 11, 23, and 41, Natarajan discloses transmitting the set of parameters

occurs when the distribution means detects a change in the set of parameters (Col 7, lines 10-14).

29. Regarding claims 12, 24, and 42, Natarajan discloses transmitting the set of parameters

occurs when the network administrator detects a change in the set of parameters (Col 28, lines

32-35).

30. Regarding claim 13, Hadland discloses a system for transmitting data from a central source

to a plurality of receiving devices where at least two of the receiving devices are located on

disparate segments of a communications network, comprising:

- ❑ a device for distribution a plurality of sets of instructions (Fig 1, Component 54),

  wherein each set of instructions is for adapting the data according to a set of

  transmission parameters associated with a segment of the communications network

  (Col 3, lines 24-27; for multiple devices with different segment transmission

  parameters (protocols) see Col 5, lines 10-18), and

- ❑ a central server(Figure 1, Component 72; Col 4, lines 6-7), comprising:

- ❑ a receiver for receiving at least one of the sets of instructions from the network

  administration device (inherent communication within the converter, see Figure 1,

  Component 54 communicating with components 64 and 66);

- ❑ a processor for implementing the set of instructions to adapt the data according to the

  transmission parameters associated with the segment (Figure 1, Component 66) ; and

- ❑ a transmitter for transmitting the adapted data to at least one distribution device along

  the segment (Figure 1, Component 40).

Hadland fails to disclose the device in line 4 is a *network* device. In a related art,

Natarajan discloses a *network* policy engine (Figure 2, Component 254) which distributes

control information (sets of instructions for adapting data according to a set of transmission

parameters) (Col 6, lines 56 – Col 7, line 20) to various network elements (Col 7, lines 53-54, 61-65). It would have been obvious to one of ordinary skill in art at the time of invention to modify Hadland's invention to distribute sets of instructions using the network policy engine disclosed by Natarajan in order to achieve a desired network performance level by dynamically and automatically modifying network parameters (Natarajan, Col 2, lines 20-22).

31. Regarding claim 14, Hadland discloses the receiver is for receiving the set of transmission parameters (inherent since it receives the policy and the policy defines transmission parameters Hadland Col 2, lines 27-33).

32. Regarding claim 15, Hadland discloses the set of transmission parameters specifies bandwidth restrictions of at least one network segment (Hadland e.g. Figure 1, Component 42) that is downstream from the central server (Col 2, lines 27-33).

33. Regarding claim 16, Hadland discloses the set of transmission parameters specifies maximum transmission unit (MTU) restrictions of at least one network segment (e.g. Hadland Figure 1, Component 42) that is down stream from the central server (frame formats, Col 2, lines 27-33).

34. Regarding claim 17, Hadland discloses the set of transmission parameters specifies protocol restrictions of at least one network segment that is downstream from the central server (Col 2, lines 27-33).

35. Regarding claim 18, Hadland discloses the set of transmission parameters specifies routing restrictions (e.g. transmission rates, frame formats, blocking heading) of at least one network segment that is downstream (e.g. Figure 1, Component 42) from the central server (Col 2, lines 27-33).

36. Regarding claim 19, claim 19 is drawn to similar limitations as claims 10 and 39, thus claim 19 is rejected using a similar rationale.

37. Regarding claim 20, Hadland discloses the system of claim 13, further comprising a plurality of receiving devices each for receiving an adapted stream of data from at least one of the distribution means that are upstream from each receiving device (Figure 1, Components 16, 18, 20).

38. Regarding claim 21, the combined Hadland and Natarajan system discloses the system of claim 13, wherein each distribution means further comprises:

- ❑ a receiver for receiving the data (Hadland Figure 1, component 30) and for receiving at least one of the sets of instructions that instruction the distributions means to adapt the data according to at least one of the sets of parameters (the Hadland converter 14 receivers instructions from Natarajan's policy engine in the combined systems);

- ❑ a processor for implementing each received set of instructions (inherent) ; and

- ❑ a transmitter for transmitting the adapted data to at least one receiving device (Figure, component 40). '

39. Regarding claims 25 and 26, Natarajan discloses the transmitter is for transmitting a request to receive instructions or data (requesting data for the data store; Col 8, lines 62-65).

40. Regarding claim 27, Hadland discloses the processor is for addressing the data (adapting the data, Col 4, lines 55-67).

41. Regarding claims 28-30, the limitations of claims 28-30 are similarly drawn to the limitations of claims 7-9 respectively, thus they are rejected using a similar rationale.

Conclusion

42.   The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent
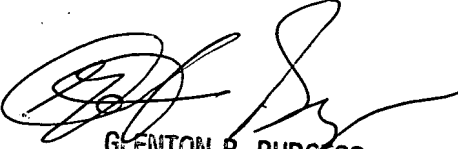
to applicant's disclosure.

43.   This office action is made **NON-FINAL.**

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The

examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/10/2005

GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100